

ABSTRACT

A monolithic photodetector including a photodiode, a precharge MOS transistor, a control MOS transistor, a read MOS transistor, and a transfer MOS transistor, the photodiode and the transfer transistor being formed in a same substrate of a first conductivity type, the photodiode including a first region of the second conductivity type formed under a second region of the first conductivity type more heavily doped than the first region, and above a third region of the first conductivity type more heavily doped than the substrate, the first region being the source of the second conductivity type of the transfer transistor, the second and third regions being connected to the substrate and being at a fixed voltage.